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EXAMINER	
RYMAN, DANIEL J	

ART UNIT	PAPER NUMBER
2665	

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Please find below and/or attached an Office communication concerning this application or proceeding.

DY

Office Action Summary	Application No.	Applicant(s)	
	09/544,544	UCHINO, ATSUSHI	
	Examiner	Art Unit	
	Daniel J. Ryman	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *17 September 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-17* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 9/17/2003 have been fully considered but they are not persuasive. Applicant argues, with respect to independent claims 1, 2, and 6-9, on pages 17-21 and 24-26 of the response, that Dinkin and France, individually or in combination, fail to teach of suggest a host that acquires routing information from an interworking unit. In this case Applicant draws the distinction that the interworking unit is not a host on the network. According to Newton's Telecom Dictionary, a host is defined as "an intelligent device attached to a network". As such, as broadly defined, an interface node is a host since it is "an intelligent device attached to a network". Under this interpretation, hosts acquire routing information and use it to perform searches, as is evidenced by Dinkin and France. Since a host can acquire routing information from an interworking unit and use this information to perform a search, Examiner maintains that the rejections are proper.

2. Applicant goes on to argue that Dinkin does not disclose that the host sends a broadcast packet to at least any one of the plurality of domains other than the first domain. In the previous rejection, Examiner made an obvious statement, with which Applicant disagrees. Upon further review of Dinkin, Examiner contends that Dinkin explicitly discloses sending a broadcast packet to at least any one of the plurality of domains other than the first domain by the host (interface unit). In col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51, Dinkin discloses that the first domain is searched, and if the resource is not found, then the other domains are broadcast searched. Since Dinkin discloses the claim language, Examiner maintains that the rejection is proper.

3. On pages 20-21, Applicant argues that Dinkin fails to teach sending a broadcast packet to any one of a plurality of domains other than the first domain since Dinkin discloses that the search request is broadcast only to adjacent nodes of the first network. However, in col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51, Dinkin makes it very clear that the adjacent nodes either are in another domain or the adjacent nodes send the broadcast to other domains. As such, Examiner maintains that Dinkin discloses sending a broadcast packet to any one of a plurality of domains other than the first domain. In addition, Applicant states that the directed search of Dinkin would not use a broadcast packet. While this is true, Dinkin also discloses broadcast searches in addition to directed searches where broadcast searches use broadcast packets. Thus, Examiner maintains that the rejections are proper.

4. On pages 22, 24, and 25, regarding claims 3 and 10-12, Applicant states that Examiner failed to address the limitation of the first process for "searching for all the domains of the network" in the previous rejection. While not explicitly stated within the previous rejection, Dinkin and France, nonetheless, disclose this limitation. For a clearer rejection, Examiner has rejected each claim individually in the current rejection such that Applicant can explicitly view the rejection of for each limitation of the claims.

5. On pages 23 and 25, regarding claims 4 and 13, Applicant states that Examiner failed to address the limitation "acquiring information indicating a network number and address of a router of each domain in the network from the received RIP packet" in the previous rejection. While not explicitly stated within the previous rejection, Dinkin and France, nonetheless, disclose this limitation. For a clearer rejection, Examiner has rejected each claim individually in

the current rejection such that Applicant can explicitly view the rejection of for each limitation of the claims.

6. On pages 23-24, regarding claim 5, Applicant states that Dinkin and France fail to teach or suggest a node device which acquires domain information, finds the broadcast address, generates requests, and extracts information since Dinkin teaches that a node sends a request to the IN, wherein the IN searches for addresses and sends the packet to the network. Applicant limits Dinkin to only transmitting a search request from nodes other than the interface node in the network. However, interface nodes can also send search requests in which case, Dinkin and France disclose the aforementioned limitations. Applicant also contends that the Examiner failed to address the limitations "network interface means" and "means for finding broadcast addresses for said domains" in the previous rejection. While not explicitly stated within the previous rejection, Dinkin and France, nonetheless, disclose this limitation. For a clearer rejection, Examiner has rejected each claim individually in the current rejection such that Applicant can explicitly view the rejection of for each limitation of the claims.

7. On pages 26-27, regarding claim 14, Applicant argues that Ahearn does not cure the deficiencies of Dinkin and therefore claim 14 is allowable. For the reasons stated above, Examiner maintains that Dinkin does not have deficiencies and therefore the rejection fo claim 14 is maintained.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-13 and 15-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dinkin et al (USPN 5,224,205) in view of France et al (USPN 5,754,790).

11. Regarding claim 1, Dinkin discloses a node-search method in a network, comprising the steps of: a host of a first domain (gateway node/interface node), where, as broadly defined, a gateway node is a host, where the first domain is connected to at least one interworking unit (col. 1, lines 14-57); the host, sending a broadcast packet, for requesting a response from a node which provides a specific service, to at least any one of said plurality of domains other than the first domain which is listed in the routing information (col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21)

where if a resource is not found with a limited search, then the interface node initiates broadcast searches of other domains; and receiving a response packet for said broadcast packet and detecting the node which sent the response packet (col. 6, line 54-col. 8, line 37). Dinkin does not expressly disclose that the host of a first domain acquires a packet which includes routing information of a network configured with a plurality of domains including, the first domain connected to at least one interworking unit; however, Dinkin does disclose that the interface node uses routing information to perform the search (col. 7, lines 4-12). It is well known in the art to use packets to allow interface nodes, such as routers, to update their network maps in order to have the maps accurately reflect any changes in the network, as is evidenced by France (col. 1, line 14-col. 2, line 30). It would have been obvious to one of ordinary skill in the art at the time of the invention to acquire a packet which includes routing information in which a domain in the network is listed in order to ensure that all interface nodes have an accurate map of the networks which the interface nodes are connecting.

12. Regarding claim 2, Dinkin discloses a node-search method in a network, comprising the steps of: using routing information about the network which is connected to an interworking unit to send a broadcast packet, for requesting a response from a node that provides a specific service, to a domain which is listed in the routing information (col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21); and receiving a response packet in response to said broadcast packet, and detecting the node which sent the response packet (col. 6, line 54-col. 8, line 37). Dinkin does not expressly disclose sending a packet, for requesting routing information from the network which is connected to an interworking unit, to the interworking unit, which is capable of storing routing information set in

advance; receiving a packet containing said routing information; however, Dinkin does disclose that the interface node uses routing information to perform the search (col. 7, lines 4-12). It is well known in the art to use packets to allow interface nodes, such as routers, to update their network maps in order to have the maps accurately reflect any changes in the network, as is evidenced by France (col. 1, line 14-col. 2, line 30). As broadly defined, each interface unit sends a packet that requests routing information when it sends its own updates since each update allows other interface units to recognize the position and active status of the sending interface unit. It would have been obvious to one of ordinary skill in the art at the time of the invention to send a packet, for requesting routing information from the network which is connected to an interworking unit to the interworking unit, which is capable of storing routing information set in advance and to receive a packet containing said routing information in order to ensure that all interface nodes have an accurate map of the networks which the interface nodes are connecting.

13. Regarding claim 3, Dinkin discloses a node-search method for searching for a node providing service in a network configured with a plurality of domains, comprising: a first process for searching for all of the domains of the network, and a second process for searching for nodes which provide a specific service in at least one of the domains which is contained in a search result in said first process (col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21) where a node searches for all of the domains of the network by acquiring and processing routing information to determine the network configuration, as is evidenced by France (col. 1, line 14-col. 2, line 30, esp. col. 1, lines 54-56).

14. Regarding claim 4, Dinkin discloses a node-search method in a network, comprising the steps of: acquiring information indicating a network number and an address of a router of each domain in the network (col. 7, lines 4-12), where Examiner takes official notice that network numbers and address of each router are well known pieces of routing information; and broadcasting, based on said acquired information, into a specific network so as to search for a node (col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37; and col. 8, line 53-col. 9, line 21). Dinkin does not disclose that the routing information is received using an RIP packet. France teaches that using RIP packets is a well-known method to distribute routing information (col. 1, line 14-col. 2, line 30). It would have been obvious to one of ordinary skill in the art at the time of the invention to use RIP packets to distribute the routing information since RIP packets are well known in the art. Dinkin in view of France does not expressly disclose broadcasting to a specific domain using a specific port number; however, Examiner takes official notice that it is well known in the art to use specific port numbers to broadcast to a specific domain since each network domain is connected to the internetworking unit via a specific port.

15. Regarding claim 5, Dinkin discloses a node-search device for searching for a node in a network, comprising: network interface means for connecting with the network, where network interface means are implicit (ref. 208, 216); means for acquiring domain information (col. 7, lines 4-12); means for finding broadcast addresses for said domains (col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21) where it is implicit that in order to send a broadcast a broadcast address must be found; means for generating a request packet to be sent to said found broadcast addresses for finding a response from a node which provides a specific service, and sending the packet to the

network through said network interface means (col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21); and means of extracting information indicating nodes which perform said specific service, which is contained in a response packet to said request packet (col. 6, line 54-col. 8, line 37). Dinkin does not expressly disclose acquiring domain information from a packet containing routing information. It is well known in the art to use packets to allow interface nodes, such as routers, to update their network maps in order to have the maps accurately reflect any changes in the network, as is evidenced by France (col. 1, line 14-col. 2, line 30). It would have been obvious to one of ordinary skill in the art at the time of the invention to acquire a packet which includes routing information in which a domain in the network is listed in order to ensure that all interface nodes have an accurate map of the networks which the interface nodes are connecting.

16. Regarding claim 6, Dinkin discloses a node-search device of a first domain for searching for a node in a network, comprising: means for sending a request packet, for requesting a response from a node which provides a specific service, which is broadcasted to at least any one of said plurality of domains other than the first domain connected through the interworking unit, to the interworking unit (col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21); and means for receiving a response packet for said request packet and detecting the node which sent the response packet (col. 6, line 54-col. 8, line 37). Dinkin does not disclose means for sending a packet, for requesting routing information for a network configured with a plurality of domains including the first domain connected to at least one interworking unit, to the at least one interworking unit, which is capable of storing preset routing information; means for receiving a packet containing

said routing information and acquiring information indicating a node contained in said routing information; however, however, Dinkin does disclose that the interface node uses routing information to perform the search (col. 7, lines 4-12). It is well known in the art to use packets to allow interface nodes, such as routers, to update their network maps in order to have the maps accurately reflect any changes in the network, as is evidenced by France (col. 1, line 14-col. 2, line 30). As broadly defined, each interface unit sends a packet that requests routing information when it sends its own updates since each update allows other interface units to recognize the position and active status of the sending interface unit. It would have been obvious to one of ordinary skill in the art at the time of the invention to have means for sending a packet, for requesting routing information for a network configured with a plurality of domains including the first domain connected to at least one interworking unit, to the at least one interworking unit, which is capable of storing preset routing information; and to have means for receiving a packet containing said routing information and acquiring information indicating a node contained in said routing information in order to ensure that all interface nodes have an accurate map of the networks which the interface nodes are connecting.

17. Regarding claim 7, Dinkin discloses a method that makes the computer of the first domain execute: a process of sending a broadcast packet, for requesting a response from a node which provides a specific service, to at least any one of said plurality of domains other than the first domain which is listed in said acquired routing information (col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21), and a process of receiving a response packet for said broadcast packet and detecting the node which sent the response packet (col. 6, line 54-col. 8, line 37). Dinkin does not expressly

disclose a process of acquiring a packet containing routing information, from at least one interworking unit of a network configured with a plurality of domains including the first domain; however, Dinkin does disclose that the interface node uses routing information to perform the search (col. 7, lines 4-12). It is well known in the art to use packets to allow interface nodes, such as routers, to update their network maps in order to have the maps accurately reflect any changes in the network, as is evidenced by France (col. 1, line 14-col. 2, line 30). It would have been obvious to one of ordinary skill in the art at the time of the invention to have a process of acquiring a packet containing routing information, from at least one interworking unit of a network configured with a plurality of domains including the first domain in order to ensure that all interface nodes have an accurate map of the networks which the interface nodes are connecting. Dinkin in view of France possibly does not expressly disclose that the process is implemented by a program in a computer-readable storage medium; however, Examiner takes official notice that implementing a method in software is very well known.

18. Regarding claim 8, Dinkin discloses a process of sending a broadcast packet for requesting a response from a node which provides a specific service, to at least any one of said plurality of domains other than the first domain which is listed in routing information (col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21); and a process of receiving a packet in response to said broadcast packet, and detecting the node which sent the response packet (col. 6, line 54-col. 8, line 37). Dinkin does not expressly disclose a process of sending a packet, for requesting routing information from at least one interworking unit of a network configured with a plurality of domains including the first domain, to the at least one interworking unit, which is capable of

storing preset routing information set in advance and a process of receiving a packet containing said routing information; however, however, Dinkin does disclose that the interface node uses routing information to perform the search (col. 7, lines 4-12). It is well known in the art to use packets to allow interface nodes, such as routers, to update their network maps in order to have the maps accurately reflect any changes in the network, as is evidenced by France (col. 1, line 14-col. 2, line 30). As broadly defined, each interface unit sends a packet that requests routing information when it sends its own updates since each update allows other interface units to recognize the position and active status of the sending interface unit. It would have been obvious to one of ordinary skill in the art at the time of the invention to have a process of sending a packet, for requesting routing information from at least one interworking unit of a network configured with a plurality of domains including the first domain, to the at least one interworking unit, which is capable of storing preset routing information set in advance and a process of receiving a packet containing said routing information in order to ensure that all interface nodes have an accurate map of the networks which the interface nodes are connecting. Dinkin in view of France possibly does not expressly disclose that the process is implemented by a program in a computer-readable storage medium; however, Examiner takes official notice that implementing a method in software is very well known.

19. Regarding claim 9, referring to claim 8, Dinkin in view of France discloses that the interworking unit is a router (France: col. 1, line 14-col. 2, line 30).

20. Regarding claim 10, Dinkin discloses a first process for searching for all of the domains of the network, and a second process for searching for a node providing a specific service in at least one of the domains which is contained in a search result in said first process (col. 2, line 51-

col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21) where a node searches for all of the domains of the network by acquiring and processing routing information to determine the network configuration, as is evidenced by France (col. 1, line 14-col. 2, line 30, esp. col. 1, lines 54-56). Dinkin in view of France possibly does not expressly disclose that the process is implemented by a program in a computer-readable storage medium; however, Examiner takes official notice that implementing a method in software is very well known.

21. Regarding claim 11, referring to claim 10, Dinkin in view of France discloses in said first process, sending a packet requesting routing information to a device in which the routing information is stored so as to acquire information indicating the domains (France: col. 1, line 14-col. 2, line 30, esp. col. 1, lines 54-56), where, as broadly defined, each interface unit sends a packet that requests routing information when it sends its own updates since each update allows other interface units to recognize the position and active status of the sending interface unit; and in said second process, receiving operation designating at least one domain from said acquired information indicating the domains, broadcast sending a server name request packet requesting a node name of the node providing the specific service to the designated domain, and creating a server list from server names contained in a response packet for the server name request packet (Dinkin: col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21).

22. Regarding claim 12, referring to claim 11, Dinkin in view of France discloses in said second process, receiving operation designating the kind of the service which is provided by said node, and broadcast sending a server name request packet for requesting a node name of a node

providing the designated service (Dinkin: col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21).

23. Regarding claim 13, Dinkin discloses a process of acquiring information indicating a network number and mail address of each domain in the network (col. 7, lines 4-12), where Examiner takes official notice that a network number and mail address of each domain are well known pieces of routing information; and a process of broadcasting, based on said acquired information, into a specific network so as to search for a node (col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37; and col. 8, line 53-col. 9, line 21). Dinkin does not disclose that the routing information is received using an RIP packet. France teaches that using RIP packets is a well-known method to distribute routing information (col. 1, line 14-col. 2, line 30). It would have been obvious to one of ordinary skill in the art at the time of the invention to use RIP packets to distribute the routing information since RIP packets are well known in the art. Dinkin in view of France does not expressly disclose broadcasting to a specific domain using a specific port number; however, Examiner takes official notice that it is well known in the art to use specific port numbers to broadcast to a specific domain since each network domain is connected to the internetworking unit via a specific port. Dinkin in view of France possibly does not expressly disclose that the process is implemented by a program in a computer-readable storage medium; however, Examiner takes official notice that implementing a method in software is very well known.

24. Regarding claim 15, referring to claim 1, Dinkin in view of France discloses that a plurality of interworking units exist in the network, wherein at least one of said plurality of

interworking units is a bridge, a brouter, or a router (Dinkin: Fig. 1 and col. 5, lines 9-11 and France: col. 1, line 14-col. 2, line 30).

25. Regarding claim 16, referring to claim 15, Dinkin in view of France suggests first sending the broadcast packet to at least one of said plurality of domains with the fewest hop counts (Dinkin: col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21 and France: col. 1, lines 56-63) where Dinkin discloses broadcasting the message to all domains which will include the domain with the fewest hop counts.

26. Regarding claim 17, referring to claim 15, Dinkin in view of France suggests first sending the broadcast packet to at least one of said plurality of domains with a hop count less than a specified number (Dinkin: col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37, esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21 and France: col. 1, lines 56-63) where Dinkin discloses sending the broadcast message to nodes that are only a single hop count away.

27. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dinkin et al (USPN 5,224,205) in view of Ahearn et al (USPN 5,926,463).

28. Regarding claim 14, Dinkin discloses a process of acquiring information indicating a network number and an address of a router of each domain of said plurality of domains (col. 7, lines 4-12), where Examiner takes official notice that a network number and router address are well known pieces of routing information; a process of broadcasting into at least any one of said plurality of domains other than the first domain, based on said acquired information so as to search for a node (col. 2, line 51-col. 3, line 3; col. 3, lines 24-32; col. 6, line 54-col. 8, line 37,

esp. col. 7, lines 48-51; and col. 8, line 53-col. 9, line 21). Dinkin does not expressly disclose that the routing information is acquired by receiving an SNMP (Simple Network Management Protocol) packet from at least one router of a network configured with a plurality of domains including the first domain. It is also well known in the art to use packets to allow interface nodes, such as routers, to update their network maps using SNMP packets in order to have the maps accurately reflect any changes in the network, as is evidenced by Ahearn (col. 12, lines 3-9). It would have been obvious to one of ordinary skill in the art at the time of the invention to receive an SNMP packet which includes routing information in which a domain in the network is listed in order to ensure that all interface nodes have an accurate map of the networks which the interface nodes are connecting. Dinkin in view of Ahearn does not expressly disclose broadcasting to a specific domain using a specific port number; however, Examiner takes official notice that it is well known in the art to use specific port numbers to broadcast to a specific domain since each network domain is connected to the internetworking unit via a specific port. Dinkin in view of France possibly does not expressly disclose that the process is implemented by a program in a computer-readable storage medium; however, Examiner takes official notice that implementing a method in software is very well known.

Conclusion

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Baratz et al (USPN 4,914,571) see entire document which is relied upon heavily by Dinkin which also discloses that any node can initiate a search (col. 2, lines 28-37).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Ryman whose telephone number is (703)305-6970. The examiner can normally be reached on Mon.-Fri. 7:00-5:00 with every other Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703)308-6602. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-3900.

Daniel J. Ryman
Examiner
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